

NATIONAL MUSEUM  
OF  
VICTORIA  
MELBOURNE :: AUSTRALIA

MEMOIRS

(World List abbrev. Mem. nat. Mus. Vict.)

---

No. 22

12th JUNE, 1961

Part 10

---

ADDITIONS AND CORRECTIONS

TO THE  
CHECK LIST OF AUSTRALIAN  
ELATERIDAE (Coleoptera)

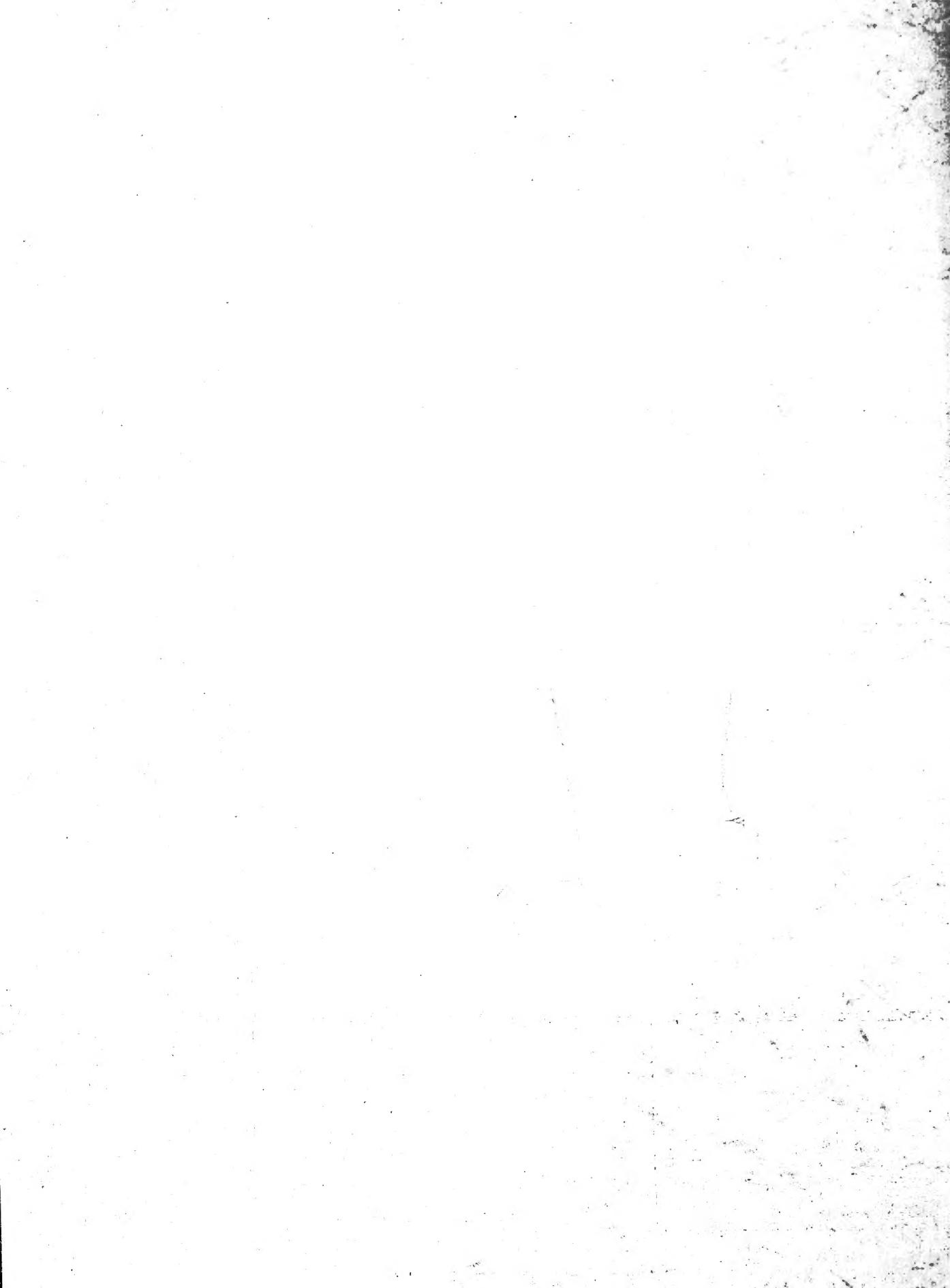
by

ARTURS NEBOISS

---

PUBLISHED BY ORDER  
OF THE TRUSTEES

---



## TRUSTEES

George Finlay, Esq., O.B.E., L.D.S., B.D.Sc., F.D.S., R.C.S. (Edin.) (Chairman)  
Professor E. S. Hills, Ph.D., F.R.S., D.I.C., D.Sc. (Deputy Chairman)  
Sir Fred Thorpe, M.C., E.D. (Treasurer)  
Henry Gerard Alexander Osborne, Esq., B.Agr.Sc.  
Sir Arthur Stephenson, C.M.G., M.C.  
Professor S. Sunderland, D.Sc., M.D., B.S., F.R.A.C.S., F.R.A.C.P.  
James C. F. Wharton, Esq., B.Sc.

**Secretary to the Trustees:** W. McCall, E.D.

## STAFF

### DIRECTOR:

Charles W. Brazenor

### ASSISTANT DIRECTOR:

A. N. Burns, M.Sc.

## ADMINISTRATION

### Secretary to the Director:

M. J. C. Malone

### Clerk:

P. J. Reidy

### Typistes:

Robin M. E. Walsh  
G. Mary Kay  
Catherine R. Wardley

## SCIENTIFIC STAFF

### Geology and Palaeontology:

*Curator of Fossils:* E. D. Gill, B.A., B.D., F.G.S.  
*Curator of Minerals:* A. W. Beasley, M.S., Ph.D., D.I.C., F.G.S.  
*Assistants:* R. R. Bull, B.Sc.  
H. E. Wilkinson

### Vertebrate Zoology:

*Curator of Mammals:* (Vacant)  
*Curator of Birds:* A. R. McEvey, B.A.  
*Assistant:* A. J. Coventry



# Additions and Corrections to the Check List of Australian Elateridae (Coleoptera)

By Arturs Neboiss, M.Sc., F.R.E.S., Assistant Curator of Insects,  
National Museum of Victoria.

## INTRODUCTION.

Since the publication of "A check list of Australian Elateridae" Neboiss (1956) additional information has been accumulated and includes verifications and additions to the locations of type specimens, systematic changes made in recent publications, and corrections.

This list follows the style of 1956 list, and should be used in conjunction with it. Page references to the latter are given on the left side of page, but full reference to 1956 check list is made only to species where taxonomic changes had taken place. Discrepancies in location of type specimens, particularly those of Blackburn's, occurred mostly where the lists of type specimens, received from various museums, was not quite complete or accurate at that time. Dr. Van Zwaluwenburg's survey in European museums had clarified many of these points (1959), but there is still a small number of species where location of type specimens is unknown or otherwise uncertain.

Institutions and private collections holding type or paratype specimens are listed under following abbreviations:

AM—Australian Museum, Sydney.

BM—British Museum (Natural History), London.

CD—Private collection of Mr. C. Deane, Montville, Qld.

CSIRO — Division of Entomology Museum, C.S.I.R.O.,  
Canberra.

DANSW—Department of Agriculture, New South Wales.

DEI—Deutsches Entomologisches Institut, Berlin.

ETS—Private collection of Mr. E. T. Smith, Melbourne.

FEW—Private collection of Mr. F. E. Wilson, Melbourne.

FTF—Private collection of Mr. F. T. Fricke, Sydney.

Genoa—Museo Civico di Storia Naturale, Genoa.

HSPA—Hawaiian Sugar Planters Association, Honolulu.

IRSNB—Institut Royal des Sciences Naturelles de Belgique, Brussels.

JA—Private collection of Mr. J. Armstrong, Nyngan, N.S.W.

JS—Private collection of Mr. J. Sedlacek, San Francisco.

MACL—Macleay Museum, University of Sydney.

MDN—Museum d'Histoire Naturelle, Paris.

NM—National Museum of Victoria, Melbourne.

NRS—Naturhistoriska Riksmuseet, Stockholm.

Oxford—Hope Department, University Museum, Oxford.

QM—Queensland Museum, Brisbane.

QU—Queensland University, Brisbane.

SAM—South Australian Museum, Adelaide.

TDA—Tasmanian Department of Agriculture, Hobart.

ZM—Zoologisches Museum, Humboldt University, Berlin.

Following the death of Mr. F. E. Wilson, his collection of Australian insects was presented to the National Museum of Victoria, and thus all types referred to in this list as being in that collection are now located in the above institution.

#### ACKNOWLEDGMENTS.

The author is greatly indebted to the Institutions and private collectors shown above for their co-operation. The most sincere thanks are due to Miss Christine von Hayek, London; Dr. R. H. Van Zwaluwenburg, Santa Rosa; Dr. A. Villiers, Paris, and Dr. K. Delkeskamp, Berlin, for their valuable information and criticism.

p. 3.

Subfamily *ADELOCERINAE*(this name replaces subfamily *AGRYPNINAE*)Genus *Lanelater* Arnett*Agrypnus* Eschscholtz, 1829, in Thon. Ent. Arch. **2**(1): 32.*Lanelater* Arnett, 1952, Wasmann Journ. Biol. **10**: 105.TYPE species: *Agrypnus schotti* LeConte, 1853, Trans. Amer. Phil. Soc. **10**: 492.

The reason for change of generic name from *Agrypnus* to *Lanelater* is given by Arnett (1952) as follows: "This new generic name applies to those species which were formerly placed in the genus *Agrypnus* Eschscholtz (1829, page 32). Mr. M. C. Lane kindly pointed out to me that Westwood (1838, Introduction to the modern classification of insects, vol. 2, appendix page 26) designated *Elater murinus* Linnaeus the type of *Agrypnus*. This means that Hyslop's (1921) designation of *Elater tomentosus* Fabricius as the type of *Agrypnus* is not acceptable, and makes this generic name isogenotypic with *Lacon*, which is not North American. I therefore propose the new generic name, . . ."

According to Arnett it includes 80 species, 7 of which are recorded to be Australian and Oceanic in distribution. How far this change will effect the taxonomy of Australian species has to be seen from a complete revision of the *Agrypnus*, *Adelocera*, *Lacon* complex.

*ereptus* (Fleutiaux)*Agrypnus ereptus*, Neboiss, 1956, Mem. Nat. Mus. Vict. **22**(2): 3.*Lanelater ereptus* (Cand.) Zwaluwenburg, 1959, Pac. Ins. **1**: 349.

TYPE: BM.

*grandis* (Hope)*Agrypnus grandis*, Neboiss, 1956, Mem. Nat. Mus. Vict. **22**(2): 3.*Lanelater grandis*, Zwaluwenburg, 1959, Pac. Ins. **1**: 350.

TYPE: Oxford. (Lectotype ♀ selected by Zwaluwenburg).

p. 4. *resectus* (Candeze)*Agrypnus resectus*, Neboiss, 1956, Mem. Nat. Mus. Vict. **22**(2): 4.

TYPE: IRSNB.

Genus *Adelocera* Latreille*lindensis* (Blackburn)*Lacon lindensis*, Neboiss, 1956, Mem. Nat. Mus. Vict. **22**(2): 9.*Adelocera lindensis*, Zwaluwenburg, 1959, Pac. Ins. **1**: 352.

TYPE: BM. PARATYPE: (cotype) — SAM.

*modesta* (Boisduval) --- see *Lacon modestus* (Boisduval).*socia* (Candeze)

TYPE: BM.

Genus *Adelocera* subgenus *Compsolacon* Reitter*Compsolacon*, Neboiss, 1956, Mem. Nat. Mus. Vict. **22**(2): 14.*Adelocera* subg. *Compsolacon*, Zwaluwenburg, 1959, Pac. Ins. **1**: 352.*crassa* (Candeze)*Lacon crassus*, Neboiss, 1956, Mem. Nat. Mus. Vict. **22**(2): 7.*Adelocera (Compsolacon) crassa*, Zwaluwenburg, 1959, Pac. Ins. **1**: 353.

TYPE: Bonn Museum (Bruck Coll.) ; lost in 1939-45 war.

*duplex* (Blackburn)*Lacon duplex*, Neboiss, 1956, Mem. Nat. Mus. Vict. **22**(2): 7.*Adelocera (Compsolacon) duplex*, Zwaluwenburg, 1959, Pac. Ins. **1**: 353.

TYPE: BM. PARATYPES: (cotypes) — AM; SAM.

*farinensis* (Blackburn)*Lacon farinensis*, Neboiss, 1956, Mem. Nat. Mus. Vict. **22**(2): 7.*Adelocera (Compsolacon) farinensis*, Zwaluwenburg, 1959, Pac. Ins. **1**: 353.

TYPE: BM. PARATYPES: (cotypes) — SAM.

*labiosa* (Candeze)*Lacon labiosus*, Neboiss, 1956, Mem. Nat. Mus. Vict. **22**(2): 9.*Adelocera (Compsolacon) labiosa*, Zwaluwenburg, 1959, Pac. Ins. **1**: 353.

TYPE: BM.

*lateralis* (Schwarz) (as before)*mansueta* (Blackburn)*Lacon mansuetus*, Neboiss, 1956, Mem. Nat. Mus. Vict. **22**(2): 10.*Adelocera (Compsolacon) mansueta*, Zwaluwenburg, 1959, Pac. Ins. **1**: 353.

TYPE: BM. PARATYPES: (cotypes) — SAM.

*marmorata* (Candeze)*Lacon marmoratus*, Neboiss, 1956, Mem. Nat. Mus. Vict. **22**(2): 10.*Adelocera (Compsolacon) marmorata*, Zwaluwenburg, 1959, Pac. Ins. **1**: 354.

TYPE: BM. PARATYPES: (cotypes) — SAM.

TYPE of *L. squalescens* Blkb.: BM. PARATYPES: (cotypes) — SAM.*(Squalescens* Blkb. probably is not synonymous with *marmorata*  
Cand. — Hayek in litt. April, 1960.)*octava* (Candeze)*Lacon octavus*, Neboiss, 1956, Mem. Nat. Mus. Vict. **22**(2): 11.*Adelocera (Compsolacon) octava*, Zwaluwenburg, 1959, Pac. Ins. **1**: 354.

TYPE: BM.

*palpalis* (Candeze)*Lacon palpalis*, Neboiss, 1956, Mem. Nat. Mus. Vict. **22**(2): 11.*Adelocera (Compsolacon) palpalis*, Zwaluwenburg, 1959, Pac. Ins. **1**: 354.

TYPE: IRSNB.

*princeps* (Candeze)*Lacon princeps*, Neboiss, 1956, Mem. Nat. Mus. Vict. **22**(2): 12.*Adelocera (Compsolacon) princeps*, Zwaluwenburg, 1959, Pac. Ins. **1**: 354.  
TYPE: BM.*semivestitus* (Elston)

TYPE: AM. PARATYPES: (cotypes) — SAM.

Genus *Lacon* Castelnau*adustus* Elston

Two of the paratypes in AM are marked "var.".

*alboguttatus* Macleay

TYPE: MACL.

*andersoni* Blackburn

TYPE: BM.

p. 5. *atricolor* Macleay

TYPE: MACL.

*badius* Elston

PARATYPES: also NM.

*bigener* Elston

PARATYPES: also NM.

*brightensis* Blackburn

TYPE: BM. PARATYPES: (cotypes) — AM; SAM.

p. 6. *carinulatus* Candeze

TYPE: BM.

TYPE of *adelaidae* Blkb.: BM.*communis* Macleay.

TYPE: MACL.

*cordipennis* Candeze

TYPE: BM.

p. 7. *crassus* Candeze — see *Adelocera (Compsolacon) crassa* (Candeze).*duboulayi* Candeze

TYPE: BM.

*duplex* Blackburn — see *Adelocera (Compsolacon) duplex* (Blkb.).*elstoni* Neboiss

PARATYPE: AM.

*farinensis* Blackburn — see *Adelocera (Compsolacon) farinensis* (Blkb.).

p. 8. *fasciolatus* Macleay

TYPE: MACL.

*fatulus* Candeze

TYPE: BM.

*ferrugineus* Candeze

TYPE: BM.

*foveicollis* Macleay

TYPE: MACL.

*froggatti* Macleay

TYPE: MACL.

p. 9. *incultus* Macleay

TYPE: MACL.

*labiosus* Candeze — see *Adelocera (Compsolacon) labiosus* (Cand.).

*laticollis* Candeze

TYPE: BM.

*lindensis* Blackburn — see *Adelocera lindensis* (Blkb.).

*lineatellus* Macleay

TYPE: MACL.

p. 10. *mansuetus* Blackburn — see *Adelocera (Compsolacon) mansueta* (Blkb.).

*marginatus* Candeze

TYPE: BM.

*marmoratus* Candeze — see *Adelocera (Compsolacon) marmorata* (Cand.).

*modestus* (Boisduval)

Cosmopolitan

*Lacon modestus*, Zwaluwenburg, 1942, Bishop Mus. Bull. **172**: 53.

*Lepidotus modesta*, Arnett, 1952, Wasman Journ. Biol. **10**: 107.

*Lacon modestus*, Zwaluwenburg, 1957, Ins. Micron. **16**(1): 7.

*Lacon modestus*, Zwaluwenburg, 1959, Pac. Ins. **1**: 355.

TYPE: BM.

*multipunctatus* Elston

PARATYPE: AM.

*nigrescens* Macleay

TYPE: MACL.

p. 11. *octavus* Candeze — see *Adelocera (Compsolacon) octava* (Cand.).

*palpalis* Candeze — see *Adelocera (Compsolacon) palpalis* (Cand.).

*parvulus* Macleay

TYPE: MACL.

*pictipennis* Candeze

TYPE: BM.

*porriginosus* Candeze

TYPE: BM.

p. 12. *princeps* Candeze — see *Adelocera (Compsolacon) princeps* (Cand.).

*punctipennis* Candeze

TYPE: BM.

*rubescens* Macleay

TYPE: MACL.

*rubicundulus* Macleay

TYPE: MACL.

*rufopiceus* Macleay

TYPE: MACL.

*scaber* Candeze

N.S.W.

*Lacon scaber*, Candeze, 1857, Mem. Soc. Sci. Liege **12**: 153.

*Lacon scaber*, Redtenbacher, 1868, Reise Novara. . . Zool. **2**: 93.

TYPE: ?.

p. 13. *subtilis* Macleay

TYPE: MACL.

*ursulus* Candeze

TYPE: BM.

*variabilis* Candeze

TYPE of *L. maculosus* MacL.: MACL.

p. 14. *variolus* Candeze

TYPE: BM.

Genus *Compsolacon* Reitter

see genus *Adelocera* subgenus *Compsolacon* Reitter.

p. 15.

Genus *Homoeolaccon* Blackburn*gracilis* Blackburn

TYPE: BM. PARATYPES: (cotypes) — IRSNB; SAM.

Genus *Myrmodes* Candeze*akidiformis* Candeze*Myrmodes akidiformis*, Zwaluwenburg, 1959, Pac. Ins. 1: 355.

TYPE: BM.

Subfamily **HEMIRRHIPINAE**Genus *Alaus* Eschscholtz*albatus* Candeze*Alaus albatus*, Zwaluwenburg, 1959, Pac. Ins. 1: 355.

TYPE: MDN (designated by Fleutiaux).

p 16. *funebris* Candeze*Alaus funebris*, Heller, 1900, Denkschr. Med.-Naturw. Ges. Jena 8(17): 620.*gibboni* Newman*Alaus gibboni*, Zwaluwenburg, 1959, Pac. Ins. 1: 359.

TYPE: BM (?).

*prosectus* Candeze*Alaus prosectus*, Zwaluwenburg, 1959, Pac. Ins. 1: 362.*sericeus* Candeze*Alaus sericeus*, Zwaluwenburg, 1959, Pac. Ins. 1: 362.

p. 17.

Genus *Tetrigus* Candeze*australicus* Blackburn*Tetrigus australicus*, Zwaluwenburg, 1959, Pac. Ins. 1: 363.

TYPE: BM. (specimen in NM probably cotype).

Subfamily **TETRALOBINAE**Genus *Pseudotetralobus* Schwarz*albertisi* (Candeze)*Pseudotetralobus albertisi*, Zwaluwenburg, 1959, Pac. Ins. 1: 365.

TYPE: Genoa.

*australasiae* (Gory)*Pseudotetralobus australasiae*, Zwaluwenburg, 1959, Pac. Ins. 1: 365.

TYPE: BM.

TYPE of *P. manglesi* (Hope): Oxford.

p. 18. *capucinus* (Candeze)

*Pseudotetralobus capucinus*, Zwaluwenburg, 1959, Pac. Ins. 1: 365.  
TYPE: IRSNB.

*fortnumi* (Hope)

*Pseudotetralobus fortnumi*, Zwaluwenburg, 1959, Pac. Ins. 1: 365.  
TYPE: Oxford.

*murrayi* (Candeze)

*Pseudotetralobus murrayi*, Zwaluwenburg, 1959, Pac. Ins. 1: 365.  
TYPE: BM.

*punctipennis* Elston

PARATYPE: AM.

p. 19. *quadrifoveatus* (Macleay)

TYPE: MACL.

Subfamily **PACHYDERINAE**Genus *Glypheus* Candeze*alpinus* Blackburn

TYPE: BM. PARATYPES: (cotypes) — SAM.

*decoratus* Candeze

TYPE: MDN (designated by Fleutiaux).

p. 20. *militaris* Carter

PARATYPE: SAM.

*nigrinus* Carter

TYPE: AM.

*sanguineus* Elston

PARATYPE: AM.

*subfasciatus* Carter

TYPE: AM.

*villosulus* Candeze

TYPE: BM.

Genus *Simodactylus* Candeze*cinnamomeus* (Boisduval)

*Simodactylus cinnamomeus*, Zwaluwenburg, 1959, Pac. Ins. 1: 368.  
(doubtful whether Australian species)  
TYPE: BM.

## Subfamily CONODERINAE

p. 21. Genus *Glyphochilus* Candeze*bicolor* Candeze

TYPE: IRSNB.

*championi* Candeze

TYPE: IRSNB.

*furvus* (Erichson)

TYPE: ZM.

*leptus* Candeze

TYPE: BM.

*lucidus* (Erichson)

TYPE: ZM.

*montanus* Blackburn

TYPE: BM. PARATYPES: (cotypes) - SAM.

*occidentalis* Candeze

TYPE: IRSNB.

Genus *Conoderus* Eschscholtzp. 23. after *aurulentus* enter:*australasiae* Boisduval -- see *Conoderus basalis* (Gyllenhal).*basalis* (Gyllenhal)*Monocrepidius australasiae*, Redtenbacher, 1868, Reise der . . . Novara. Zool. **2**: 93.*basilaris* (Candeze)*Conoderus basilaris*, Zwaluwenburg, 1959, Pac. Ins. **1**: 370.  
TYPE: Genoa.p. 24. *cerdo* (Erichson)

TYPE: ZM.

*compactus* (Candeze)*Conoderus compactus*, Zwaluwenburg, 1959, Pac. Ins. **1**: 370; fig. 5.*coxalis* (Candeze)

TYPE: BM.

p. 25. *eveillardi* (LeGuillou)*Conoderus eveillardi*, Zwaluwenburg, 1959, Pac. Ins. **1**: 371.

TYPE: MDN (designated by Fleutiaux).

TYPE of *M. rubicundus* Macl.: MACL.*fabrilis* (Erichson)*Monocrepidius fabrilis*, Lea, 1908, Proc. Roy. Soc. Vict. (N.S.), **20**: 156.  
TYPE: ZM.*flavicans* (Candeze) -- see *Conoderus (Heteroderes) flavicans* (Cand.).

p. 26. *fortis* (Blackburn)

TYPE: BM. PARATYPES: (cotypes) — SAM.

*fuscicornis* (Erichson)

TYPE: ZM.

*ingens* (Blackburn)

TYPE: BM. PARATYPES: (cotypes) — SAM.

*kekeli* (Candeze)

*Conoderus jekeli*, Zwaluwenburg, 1959, Pac. Ins. 1: 371.

TYPE: BM.

*juvenis* (Blackburn)

*Conoderus juvenis*, Zwaluwenburg, 1959, Pac. Ins. 1: 371; fig. 6.

p. 27. *macleayanus* Schenkling

TYPE: MACL.

*menevillei* (Candeze)

*Monocrepidius menevillei*, Redtenbacher, 1868, Reise der . . . Novara. Zool. 2: 93.

p. 28. *nonus* (Macleay)

TYPE: MACL.

*octavus* (Macleay)

TYPE: MACL.

p. 29. *planiusculus* (Candeze)

*Conoderus planiusculus*, Zwaluwenburg, 1959, Pac. Ins. 1: 372.

*planus* (Candeze)

*Conoderus planus*, Zwaluwenburg, 1959, Pac. Ins. 1: 372.

*primus* (Macleay)

TYPE: MACL.

*quartus* (Macleay)

TYPE: MACL.

p. 30. *quintus* (Macleay)

TYPE: MACL.

*regularis* (Candeze)

*Conoderus regularis*, Zwaluwenburg, 1959, Pac. Ins. 1: 371; 372.

TYPE: Genoa.

*rufifrons* (Candeze)

*Conoderus rufifrons*, Zwaluwenburg, 1959, Pac. Ins. 1: 372; fig. 7.

*rutilicornis* (Erichson)  
TYPE: ZM.

*secundus* (Macleay)  
TYPE: MACL.

p. 31. *seniculus* (Candeze)

*Conoderus seniculus*, Zwaluwenburg, 1959, Pac. Ins. **1**: 372.

*septimus* (Macleay)  
TYPE: MACL.

*sextus* (Macleay)  
TYPE: MACL.

*simulans* (Candeze)

*Conoderus simulans*, Zwaluwenburg, 1959, Pac. Ins. **1**: 373.  
TYPE: Genoa.

*socius* (Candeze)

*Conoderus socius*, Zwaluwenburg, 1959, Pac. Ins. **1**: 373.  
TYPE: IRSNB.

*squalescens* (Candeze)

*Conoderus squalescens*, Zwaluwenburg, 1959, Pac. Ins. **1**: 373.  
TYPE: IRSNB.

*squalidus* (Candeze)

*Conoderus squalidus*, Zwaluwenburg, 1959, Pac. Ins. **1**: 373.  
(generic position doubtful)

*strigatus* (Candeze)

*Conoderus strigatus*, Zwaluwenburg, 1959, Pac. Ins. **1**: 373.  
TYPE: IRSNB.

p. 32. *tabidus* (Erichson)

TYPE: ZM.  
TYPE of *Ludius crocopus* Hope: ?.

*tertius* (Macleay)  
TYPE: MACL.

*torresi* (Candeze)

*Conoderus torresi*, Zwaluwenburg, 1959, Pac. Ins. **1**: 373; fig. 8.  
TYPE: Genoa.

*tumidus* (Candeze)

*Conoderus tumidus*, Zwaluwenburg, 1959, Pac. Ins. **1**: 373.  
TYPE: IRSNB.

p. 33. *variegatus* (Blackburn)

TYPE: BM. PARATYPES: (cotypes) — SAM; AM.

*ventralis* (Candeze)

*Conoderus ventralis*, Zwaluwenburg, 1959, Pac. Ins. 1: 371; 374.

TYPE: IRSNB.

Genus *Conoderus* subgenus *Heteroderes* Latreille

*Heteroderes*, Neboiss, 1956, Mem. Nat. Mus. Vict. 22(2): 34.

*Conoderus* subgen. *Heteroderes*, Zwaluwenburg, 1959, Pac. Ins. 1: 375.

*albidus* (Macleay) (as before)

*blackburni* Zwaluwenburg

*Heteroderes carinatus* Blackburn, 1889, Proc. Linn. Soc. N.S.W. (2) 3: 1423.  
(not *C. carinatus* Cand. 1859).

*Heteroderes carinatus*, Neboiss, 1956, Mem. Nat. Mus. Vict. 22(2): 34.

*Conoderus (Heteroderes) blackburni*, Zwaluwenburg, 1959, Pac. Ins. 1: 375.

TYPE: BM. PARATYPES: (cotypes) — SAM.

*cairnensis* Blackburn — see *Conoderus (Heteroderes) flavicans* (Cand.).

*carinatus* Blackburn — see *Conoderus (Heteroderes) blackburni* Zwal.

*flavicans* (Candeze)

Qld.

*Monocrepidius flavicans*, Candeze, 1878, Ann. Mus. Stor. nat. Genova, 12: 116.

*Heteroderes cairnensis*, Blackburn, 1893, Trans. Roy. Soc. S. Austr. 17: 296.

*Conoderus flavicans*, Neboiss, 1956, Mem. Nat. Mus. Vict. 22(2): 25.

*Heteroderes cairnensis*, Neboiss, ibid, p. 34.

*Conoderus (Heteroderes) flavicans*, Zwaluwenburg, 1959, Pac. Ins. 1: 375.

TYPE: Genoa.

TYPE of *H. cairnensis* Blkb.: BM. PARATYPES: (cotypes) — AM; SAM.

Genus *Aeolus* Eschscholtz

*australis* Candeze

*Aeolus australis*, Zwaluwenburg, 1959, Pac. Ins. 1: 376.

TYPE: NRS.

*queenslandicus* Blackburn — see *Aeoloderma queenslandica* (Blkb.)

Genus *Aeoloderma* Fleutiaux

*Aeoloderma* Fleutiaux, 1928, Encyc. Ent. Paris B.I. Coll. 3: 135.

TYPE species: *Elater crucifer* Rossi, 1790, Faune Etr. 1: 183.

*queenslandica* (Blackburn)

N-th Qld.

*Aeolus queenslandicus*, Blackburn, 1892, Proc. Linn. Soc. N.S.W. (2) 7: 295.

*Aeolus queenslandicus*, Neboiss, 1956, Mem. Nat. Mus. Vict. 22(2): 33.

*Aeoloderma queenslandica*, Zwaluwenburg, 1959, Pac. Ins. 1: 376.

TYPE: BM.

p. 34.

Genus *Heteroderes* Latreillesee genus *Conoderus* subgenus *Heteroderes* Latreille.Subfamily *ELATERINAE* becomes *AMPEDINAE*

p. 35.

Genus *Ampedus* Megerle*Ampedus*, Megerle, 1833, in Dejean; replaces *Elater*.TYPE species: *Elater sanguineus* Linn. 1758, Syst. Nat. ed. 10: 405.*cinnamomeus* (Macleay)

TYPE: MACL.

*granulatipennis* (Lea)

PARATYPES: TDA; NM; SAM.

*inconspicuus* (Macleay)

TYPE: MACL.

*longiusculus* (Macleay)

TYPE: MACL.

p. 36. *perplexus* (Candeze)

TYPE: BM.

*wentworthensis* (Blackburn)*Elater wentworthensis*, Blackburn, 1897, Trans. Roy. Soc. S. Austr. 21: 32.

PARATYPES: (cotypes) — SAM.

*xanthomus*, Macleay, W. S. — see *Anilicus xanthomus* (Macl.).Genus *Megapenthes* Kiesenwetter*automolus* Candeze*Neotrichophorus automolus*, Neboiss, 1956, Mem. Nat. Mus. Vict. 22(2): 57.*Megapenthes automolus*, Zwaluwenburg, 1959, Pac. Ins. 1: 379.

TYPE: BM.

*dolens* Candeze*Neotrichophorus dolens*, Neboiss, 1956, Mem. Nat. Mus. Vict. 22(2): 57.*Megapenthes dolens*, Zwaluwenburg, 1959, Pac. Ins. 1: 380.

TYPE: BM.

*futilis* Candeze*Megapenthes futilis*, Blackburn, 1897, Trans. Roy. Soc. S. Austr. 21: 32.*lituratus* Candeze*Megapenthes lituratus*, Zwaluwenburg, 1959, Pac. Ins. 1: 381.

TYPE: MDN.

p. 37.

Genus *Melanoxanthus* Eschscholtz*angularis* Candeze

*Melanoxanthus angularis*, Zwaluwenburg, 1959, Pac. Ins. **1**: 385.  
TYPE: Genoa. (Terra typica — New Guinea).

*australis* Candeze

*Melanoxanthus australis*, Zwaluwenburg, 1959, Pac. Ins. **1**: 385.  
TYPE: MDN (designation by Fleutiaux).

*biarctus* Carter

TYPE: MACL. PARATYPES: NM; SAM.

p. 38. *fasciolatus* (Macleay)

TYPE: MACL.

*froggatti* (Macleay)

TYPE: MACL.

*jucundus* Carter

PARATYPES: MACL.

*lativittis* Carter

PARATYPES: AM.

*melanocephalus* (Fabricius) N.S.W.

*Elater melanocephalus*, Fabricius, 1781, Spec. Ins. **1**: 272.

*Melanoxanthus melanocephalus*, Redtenbacher, 1868, Reise der . . . Novara.  
Zool. **2**: 95 (from Sydney).

*Melanoxanthus melanocephalus*, Zwaluwenburg, 1942, Bishop Mus. Bull. **172**: 53.

*Melanoxanthus melanocephalus*, Zwaluwenburg, 1959, Pac. Ins. **1**: 387.  
TYPE: BM.

*ruficollis* Candeze

TYPE: Genoa.

p. 39. Subfamily *PSYSORRHININAE* should be placed before subfamily *AMPEDINAE*.

Subfamily *HYPOLITHINAE*

Genus *Hypbolithus* Eschscholtz  
to replace genus *Hypnodus* Dill.

*Hypolithus*, Eschscholtz, 1829, in Thon, "Entomol. Arch." 2(1): 34.

*Hypolithus*, Lane, 1948, Proc. Ent. Soc. Wash. **50**: 223.

TYPE species: *Hypolithus littoralis* Eschscholtz ibid.

*dimidiatus* (Macleay)

TYPE: MACL.

TYPE of *C. semifasciatus* MacL.: MACL.

Subfamily **CARDIOPHORINAE**p. 41. Genus *Paracardiophorus* Schwarz.*amabilis* Carter

PARATYPES: SAM.

p. 42. *dulcis* Carter

PARATYPES: MACL.

p. 43. *eucalypti* (Blackburn)

TYPE: BM.

*humilis* (Candeze)*Paracardiophorus humilis*, Lea, 1908, Proc. Roy. Soc. Vict. (N.S.) **20**: 157.*litoralis* Carter

PARATYPES: AM.

p. 44. *macleayi* (Schwarz)

TYPE: MACL.

*nigrosuffusus* Carter

PARATYPES: MACL.

p. 45. *varians* Carter

PARATYPES: AM; DANSW; MACL.

p. 46. *victoriensis* (Blackburn)

TYPE: BM.

Subfamily **ATHOINAE**p. 47. Genus *Limonius* EschscholtzTYPE species: *Elater aeoniger* DeGeer (syn. *Elater bructeri* Fab.)*angulatus* Carter

PARATYPES: MACL; DANSW.

*pubescens* Carter

PARATYPES: MACL; SAM.

Subfamily **CTENICERINAE***Ctenicerinae* Fleutiaux, 1936, Ann. Soc. Ent. Fr. **105**: 279-300.

not nom. nov. Neboiss, 1956.

Genus *Ctenicera* Latreille*ambigua* (Candeze)*Ludius ambiguus*, Schwarz, 1907, Gen. Ins. **46**: 228.*australica* (Candeze)*Ludius australicus*, Schwarz, 1907, Gen. Ins. **46**: 228.*compsorhabda* (Candeze)*Ludius compsorhabdus*, Schwarz, 1907, Gen. Ins. **46**: 228.*Ctenicera compsorhabda*, Zwaluwenburg, 1959, Pac. Ins. **1**: 401.

TYPE: BM.

p. 48. *litura* (Candeze)

*Ludius liturus*, Schwarz, 1907, Gen. Ins. **46**: 228.

*nigrina* (Macleay)

*Ludius nigrinus*, Schwarz, 1907, Gen. Ins. **46**: 228.

*rufipennis* (Macleay)

*Ludius rufipennis*, Schwarz, 1907, Gen. Ins. **46**: 228.

*suavis* (Candeze)

*Corymbites suavis*, Lea, 1908, Proc. Roy. Soc. Vict. (N.S.) **20**: 157.

TYPE: IRSNB.

*subpectinata* (Schwarz)

*Ludius subpectinatus*, Schwarz, 1907, Gen. Ins. **46**: 228.

*tasmanica* (Candeze)

TYPE: BM.

*victoriae* (Schwarz)

*Ludius victoriae*, Schwarz, 1907, Gen. Ins. **46**: 228.

*xanthoptera* (Candeze)

*Ludius xanthopterus*, Schwarz, 1907, Gen. Ins. **46**: 228.

*Ctenicera xanthoptera*, Zwaluwenburg, 1959, Pac. Ins. **1**: 401.

TYPE: BM.

Genus *Pristilophus* Latreille*impurus* Germar

TYPE: ZM.

(generic position doubtful)

## p. 49.

Genus *Elatichrosis* Hyslop

*Chrosis*, Candeze, 1863, Mem. Soc. Sci. Liege. **17**: 186 (Not Guenée 1845)

*Elatichrosis*, Hyslop, 1921, Proc. U.S. Nat. Mus. **58**: 644.

*Elatichrosis*, Neboiss, 1960, Austr. J. Zool. **8**: 293-305; figs.

TYPE species: *Chrosis exarata* Candeze, 1863, Mem. Soc. Sci. Liege, **17**: 186.

*adusta* Neboiss

Australia

*Elatichrosis adusta*, Neboiss, 1960, Austr. J. Zool. **8**: 298; figs.

TYPE: BM.

*angusticollis* (Blackburn)

Vic.

*Chrosis angusticollis*, Blackburn, 1900, Trans. Roy. Soc. S. Austr. **24**: 114.

*Elatichrosis trisulcata*, Carter, 1939, Proc. Linn. Soc. N.S.W. **64**: 305.

*Elatichrosis trisulcata*, Neboiss, 1956, Mem. Nat. Mus. Vict. **22**(2): 49.

*Elatichrosis angusticollis*, Neboiss, 1960, Austr. J. Zool. **8**: 298; figs.

TYPE: BM.

*barbata* (Candeze) — New Zealand species, to be omitted from Australian list.

***bullarta*** Neboiss Vic.  
*Elatichrosis bullarta*, Neboiss, 1960, Austr. J. Zool. **8**: 303; figs.  
 TYPES: NM. PARATYPE: QM.

***clivalis*** Neboiss N.S.W.  
*Elatichrosis clivalis*, Neboiss, 1960, Austr. J. Zool. **8**: 303; figs.  
 TYPES: NM. PARATYPES: BM; JA; AM; NM; FTF; MACL; SAM.

***dirana*** Neboiss N.S.W.  
*Elatichrosis dirana*, Neboiss, 1960, Austr. J. Zool. **8**: 302; figs.  
 TYPE: NM. PARATYPES: AM; JA; MACL; NM.

***exarata*** (Candeze) Tas.  
*Chrosis exarata*, Candeze, 1863, Mem. Soc. Sci. Liege. **17**: 186.  
*Elatichrosis exarata*, Fysslop, 1921, Proc. U.S. Nat. Mus. **58**: 644.  
*Elatichrosis exarata*, Scenekling, 1927, Col. Cat. **11**(88): 406.  
*Elatichrosis exarata*, Neboiss, 1956, Mem. Nat. Mus. Vict. **22**(2): 49.  
*Elatichrosis exarata*, Neboiss, 1960, Austr. J. Zool. **8**: 301; figs.  
 TYPES: BM.

***gananga*** Neboiss N-th Qld.  
*Elatichrosis gananga*, Neboiss, 1960, Austr. J. Zool. **8**: 296; figs.  
 TYPES: Holotype ♀ NM; Allotype ♂ SAM. PARATYPES: AM; SAM.

***illita*** (Candeze) — see *Lingana illita* (Cand.).

***kituga*** Neboiss Vic.  
*Elatichrosis kituga*, Neboiss, 1960, Austr. J. Zool. **8**: 304; figs.  
 TYPES: NM. PARATYPES: AM; BM; ETS; FEW; JA; QM.

***lansbergei*** (Candeze) S-th Qld., N-th N.S.W.  
*Chrosis lansbergei*, Candeze, 1882, Mem. Soc. Sci. Liege (2) **9**: 97.  
*Elatichrosis lansbergei*, Neboiss, 1956, Mem. Nat. Mus. Vict. **22**(2): 49.  
*Elatichrosis lansbergei*, Neboiss, 1960, Austr. J. Zool. **8**: 295; figs.  
 TYPE: MDN.

***sequestris*** Neboiss S-th Qld.  
*Elatichrosis sequestris*, Neboiss, 1960, Austr. J. Zool. **8**: 297; figs.  
 TYPES: QM.

***trisulcata*** (Erichson) Vic., Tas.  
*Pristilophus trisulcatus*, Erichson, 1842, Arch. Naturgesch. **8**(1): 139.  
*Pristilophus trisulcatus*, Germar, 1842, Zeitschr. Ent. **4**: 92.  
*Chrosis trisulcata*, Candeze, 1863, Mem. Soc. Sci. Liege **17**: 186; pl. 2, fig. 10.  
*Elatichrosis trisulcata*, Neboiss, 1956, Mem. Nat. Mus. Vict. **22**(2): 49.  
*Elatichrosis trisulcata*, Neboiss, 1960, Austr. J. Zool. **8**: 300; figs.  
 TYPE: ZM.

*vrydaghi* Neboiss S-th Qld., N-th N.S.W.

*Elatichrosis vrydaghi*, Neboiss, 1960, Austr. J. Zool. **8**: 299; figs.

TYPE: SAM. PARATYPES: AM; NM.

*wilsoni* Neboiss S-th N.S.W., Vic.

*Elatichrosis wilsoni*, Neboiss, 1960, Austr. J. Zool. **8**: 304; figs.

TYPES: FEW. PARATYPES: NM; SAM.

Genus *Lingana* Neboiss

*Lingana*, Neboiss, 1960, Austr. J. Zool. **8**: 290; figs.

TYPE species: *Chrosis illita*, Candeze, 1863, Mem. Soc. Sci. Liege **17**: 187.

*dombarta* Neboiss S.W.A.

*Lingana dombarta*, Neboiss, 1960, Austr. J. Zool. **8**: 292; figs.

TYPE: SAM.

*illita* (Candeze) S-th Qld., N.S.W., Vic.

*Chrosis illita*, Candeze, 1863, Mem. Soc. Sci. Liege **17**: 187; pl. 2, fig. 7.

*Metabrax Plasoni*, Schwarz, 1903, Dtsch. Ent. Z. **1903**: 393.

*Chrosis illita*, Schwarz, 1906, Dtsch. Ent. Z. **1906**: 368.

*Elatichrosis illita*, Schenkling, 1927, Col. Cat. **11**(88): 406.

*Elatichrosis illita*, Neboiss, 1956, Mem. Nat. Mus. Vict. **22**(2): 49.

*Lingana illita*, Neboiss, 1960, Austr. J. Zool. **8**: 291; figs.

TYPE: BM. PARATYPE: BM.

TYPE of *M. plasoni* Schw.: ?.

Genus *Aphileus* Candeze

*Aphileus*, Candeze, 1857, Mem. Soc. Sci. Liege **12**: 184.

*Aphileus*, Neboiss, 1959, Austr. J. Zool. **7**: 137.

TYPE species: *Aphileus lucanoides* Candeze, ibid.

*depressus* Candeze — see *Aphileus lucanoides* Cand.

*distinctus* Neboiss N-th Qld., N.W.A.

*Aphileus distinctus*, Neboiss, 1959, Austr. J. Zool. **7**: 138; figs. 2-4; pl. 1, fig. 1.

TYPES: Holotype ♂ NM; Allotype ♀ FEW. PARATYPES: NM; SAM.

*ferox* Blackburn N-th Qld.

*Aphileus ferox*, Blackburn, 1895, Trans. Roy. Soc. S. Austr. **19**: 50.

*Aphileus ferox*, Neboiss, 1956, Mem. Nat. Mus. Vict. **22**(2): 49.

*Aphileus ferox*, Neboiss, 1959, Austr. J. Zool. **7**: 143; figs. 18-21; pl. 1, fig. 4.

*Aphileus ferox*, Zwaluwenburg, 1959, Pac. Ins. **1**: 402.

TYPE: BM.

*goombarus* Neboiss S.W.A.

*Aphileus goombarus*, Neboiss, 1959, Austr. J. Zool. **7**: 144; figs. 22, 23; pl. 1, fig. 5.

TYPE: NM.

*lucanoides* Candeze Qld., N.S.W., W.A.

*Aphileus lucanoides*, Candeze, 1857, Mem. Soc. Sci. Liege **12**: 184; pl. 3, fig. 5.

*Aphileus depressus*, Candeze, ibid. : 185.

*Dorcastoma (Elater) Jansoni*, Newman, 1857, Trans. Ent. Soc. Lond. (N.S.) **4**: 52.

*Aphileus lucanoides*, Gemminger & Harold, 1869, Cat. Col. **5**: 1496.

*Aphileus lucanoides*, Schwarz, 1907, Gen. Ins. **46**: 231.

*Aphileus lucanoides*, Schenkling, 1927, Col. Cat. **11**(88): 406.

*Aphileus lucanoides* var. *depressus*, Elston, 1930, Ark. Zool. **22**: 18.

*Aphileus depressus*, Neboiss, 1956, Mem. Nat. Mus. Vict. **22**(2): 49.

*Aphileus lucanoides*, Neboiss, ibid.

*Aphileus lucanoides*, Neboiss, 1959, Austr. J. Zool. **7**: 139; figs. 5-14; pl. 1, fig. 2.

*Aphileus lucanoides*, Zwaluwenburg, 1959, Pac. Ins. **1**: 402.

TYPE: BM.

TYPE of *A. depressus* Cand.: BM.

TYPE of *D. jansoni* Newm.: ?.

*mulkanus* Neboiss Qld.

*Aphileus mulkanus*, Neboiss, 1959, Austr. J. Zool. **7**: 141; figs. 15-17; pl. 1, fig. 3.

TYPE: QM. PARATYPES: AM; NM; SAM; QU.

p. 50.

Genus *Chrostus* Candeze.

*quadrifoveolatus* Candeze

*Chrostus quadrifoveolatus* (?), Blackburn, 1896, Rep. Horn Exped. 2. Zool. (Col.) : 272.

*Chrostus quadrifoveolatus*, Zwaluwenburg, 1959, Pac. Ins. **1**: 402.

TYPE: IRSNB.

Genus *Hapatesus* Candeze

*Hapatesus*, Candeze, 1863, Mem. Soc. Sci. Liege **17**: 188.

Genus *Hapatesus* subgenus *Hapatesus* Candeze

*Hapatesus* s.s., Neboiss, 1957, Austr. J. Zool. **5**: 499.

TYPE species: *Hapatesus hirtus*, Candeze, ibid.

*argentatus* Neboiss Qld., N-th N.S.W.

*Hapatesus pretiosus*, Elston non Candeze, 1930, Ark. Zool. **22**: 18.

*Hapatesus (Hapatesus) argentatus*, Neboiss, 1957, Austr. J. Zool. **5**: 500; figs. 10, 11.

TYPES: AM. PARATYPES: AM; JS; MACL; NM; NRS; SAM.

*dubius*, Schwarz — see *Toorongus jugulatus* (Cand.).

*electus* Neboiss S-th Qld., N.S.W.

*Hapatesus (Hapatesus) electus*, Neboiss, ibid. : 508; figs. 23, 24.

TYPE: AM. PARATYPES: AM; BM; FEW; JA; MACL; NM; SAM; TDA.

*globosus* Neboiss. N-th Qld.

*Hapatesus (Hapatesus) globosus*, Neboiss, ibid.: 505; fig. 18.

TYPE: NM.

*hirtus* Candeze S-th Qld., N.S.W., Vic., S.A.

*Hapatesus hirtus*, Candeze, 1863, Mem. Soc. Sci. Liege **17**: 188; pl. 2, fig. 8.

*Hapatesus hirtus*, Froggatt, 1923, Forest Ins. Austr.: 35.

*Hapatesus (Hapatesus) hirtus*, Neboiss, 1957, Austr. J. Zool. **5**: 506; figs. 2-7; 19; pl. 1, fig. 2.

TYPE: IRSNB.

*hirtus* var. *minor*, Elston — see *Hapatesus (Minutesus) bubarus*, Neboiss.

*hirtus* var. *minor*, Lea — see *Hapatesus (Hapatesus) minor* (Lea).

*jugulatus* Candeze — see *Toorongus jugulatus* (Cand.).

*junctus* Neboiss S-th Qld., N.S.W.

*Hapatesus (Hapatesus) junctus*, Neboiss, ibid.: 509; fig. 25

TYPE: NM. PARATYPES: JA; JS; NM.

*kershawi* Neboiss N.S.W., Vic.

*Hapatesus (Hapatesus) kershawi*, Neboiss, ibid.: 500; figs. 8, 9.

TYPES: NM. PARATYPES: AM; ETS; FEW; NM; SAM; OM

*leai* Schenkling — see *Hapatesus (Hapatesus) minor* Lea.

*minor* (Lea) Tas., King Isl.

*Hapatesus hirtus* var. *minor*, Lea, 1908, Proc. Roy. Soc. Vict. (N.S.) **20**: 157.

*Hapatesus leai*, Schenkling, 1927, Col. Cat. **11**(88): 408.

*Hapatesus leai*, Neboiss, 1956, Mem. Nat. Mus. Vict. **22**(2): 50.

*Hapatesus (Hapatesus) minor*, Neboiss, 1957, Austr. J. Zool. **5**: 507; fig. 20.

TYPE: NM. PARATYPES: NM; TDA.

*minutus* Schwarz — see *Toorongus minutus* (Schw.).

*opulentus* Neboiss N.S.W., Vic.  
*Hapatesus (Hapatesus) opulentus*, Neboiss, *ibid.*: 505; figs. 21, 22.  
 TYPES: NM. PARATYPES: AM; BM; NM; CSIRO; QM.

*pretirosus* Candeze Qld.  
*Hapatesus pretiosus*, Candeze, 1887, *Notes Leyden Mus.* **9**: 287.  
*Hapatesus (Hapatesus) pretiosus*, Neboiss, 1957, *Austr. J. Zool.* **5**: 502; figs. 12, 13.  
 TYPE: IRSNB.

*tepidus* Neboiss S-th Qld., N-th N.S.W.  
*Hapatesus (Hapatesus) tepidus*, Neboiss, *ibid.*: 503, figs. 14, 15.  
 TYPES: Holotype ♀ AM; allotype ♂ QM. PARATYPES: NM; QM.

*zonatus* Neboiss N-th N.S.W.  
*Hapatesus (Hapatesus) zonatus*, Neboiss, *ibid.*: 504; figs. 16, 17; pl. 1, fig. 1.  
 TYPES: NM. PARATYPES: JA; NM.

Subgenus *Minutesus* Neboiss

*Hapatesus* subgen. *Minutesus*, Neboiss, 1957, *Austr. J. Zool.* **5**: 509.  
 TYPE species: *Hapatesus (Minutesus) hubanus*, Neboiss, *ibid.*

*bubanus* Neboiss N-th Qld.  
*Hapatesus hirtus* var. *minor*, Elston non Lea, 1930, *Ark. Zool.* **22**: 19.  
*Hapatesus hirtus* var. *minor*, Neboiss, 1956, *Mem. Nat. Mus. Vict.* **22(2)**: 50.  
*Hapatesus (Minutesus) hubanus*, Neboiss, 1957, *Austr. J. Zool.* **5**: 513; figs. 31-33; pl. 1, fig. 4.  
 TYPES: Holotype ♂ NRS; allotype ♀ AM. PARATYPES: AM; NM; NRS; SAM.

*gundus* Neboiss N-th Qld.  
*Hapatesus (Minutesus) gundus*, Neboiss, *ibid.*: 512; fig. 30.  
 TYPE: AM.

*pallidus* Neboiss N-th Qld.  
*Hapatesus (Minutesus) pallidus*, Neboiss, *ibid.*: 512; figs. 34, 35.  
 TYPES: NM. PARATYPES: HSPA; JS; NM.

*pervulgatus* Neboiss Qld., N.S.W.  
*Hapatesus (Minutesus) pervulgatus*, Neboiss, *ibid.*: 511; figs. 28, 29; pl. 1, fig. 3.  
 TYPES: NM. PARATYPES: AM; DANSW; QM; QU.

*sagittarius* Neboiss N-th Qld.  
*Hapatesus (Minutesus) sagittarius*, Neboiss, *ibid.*: 511; fig. 27.  
 TYPE: AM.

Genus *Toorongus* Neboiss

*Toorongus*, Neboiss, 1957, Austr. J. Zool. **5**: 515.

TYPE species: *Hapatesus jugulatus*, Candeze, 1900, Ann. Soc. Ent. Belg. **44**: 97.

*bivius* Neboiss S-th Qld., N.S.W., Vic.

*Toorongus bivius*, Neboiss, 1957, Austr. J. Zool. **5**: 517; fig. 43, pl. 1, fig. 5.

TYPES: NM. PARATYPES: CSIRO; NM; QM.

*excelsus* Neboiss N.S.W., Vic.

*Toorongus excelsus*, Neboiss, ibid.: 519; fig. 44.

TYPES: NM. PARATYPES: CD; FEW.

*jugulatus* (Candeze) N.S.W., Vic., Tas.

*Hapatesus jugulatus*, Candeze, 1900, Ann. Soc. Ent. Belg. **44**: 97.

*Hapatesus dubius*, Schwarz, 1902, Dtsch. Ent. Z. **1902**: 126.

*Hapatesus jugulatus*, Neboiss, 1956, Mem. Nat. Mus. Vict. **22**(2): 50.

*Hapatesus dubius*, Neboiss, ibid.

*Toorongus jugulatus*, Neboiss, 1957, Austr. J. Zool. **5**: 516; figs. 37-42

TYPES: IRSNB.

TYPE of *H. dubius* Schw.: DEI.

*minutus* (Schwarz) N.S.W., Vic.

*Hapatesus minutus*, Schwarz, 1903, Dtsch. Ent. Z. **1903**: 395.

*Hapatesus minutus*, Neboiss, 1956, Mem. Nat. Mus. Vict. **22**(2): 50.

*Toorongus minutus*, Neboiss, 1957, Austr. J. Zool. **5**: 518; fig. 45.

TYPES: DEI.

Subfamily **CREPIDOMENINAE**

p. 51.

Genus *Crepidomenus* Erichson

*aberrans* Lea

PARATYPES: TDA.

*adelaide* Candeze

*Crepidomenus adelaide*, Zwaluwenburg, 1959, Pac. Ins. **1**: 402.

TYPE: BM.

*australis* (Boisduval)

*Crepidomenus australis*, Lea, 1908, Proc. Roy. Soc. Vict. (N.S.). **20**: 158.

*Crepidomenus australis*, Zwaluwenburg, 1959, Pac. Ins. **1**: 403.

TYPE: BM.

*decoratus* Erichson

*Crepidomenus decoratus*, Lea, Proc. Roy. Soc. Vict. (N.S.). **20**: 158.

TYPE: ZM. PARATYPE: ZM.

p. 52. *fulgidus* Erichson

*Crepidomenus fulgidus*, Redtenbacher, 1868, Reise der . . . Novara. Zool. 2: 95.

*Crepidomenus fulgidus*, Lea, 1908, Proc. Roy. Soc. Vict. (N.S.). 20: 158.  
TYPES: ZM.

*hirtus* Candeze

*Crepidomenus hirtus*, Zwaluwenburg, 1959, Pac. Ins. 1: 403.  
TYPE: BM.

*luteipes* Boheman

*Crepidomenus luteipes*, Zwaluwenburg, 1959, Pac. Ins. 1: 403.  
TYPE: NRS. PARATYPES: (cotypes)—NRS.

*metalescens* Candeze

N.S.W.

*Crepidomenus metalescens*, Zwaluwenburg, 1959, Pac. Ins. 1: 403.  
TYPE: BM.

p. 53. *montanus* Carter

PARATYPES: DANSW.

*queenslandicus* Blair

*Crepidomenus queenslandicus*, Glen, 1950, Smiths Misc. Coll. 111(11): 181;  
figs. 10f; 37d-f.

p. 54. *taeniatus* Erichson

TYPE: ZM. PARATYPES: NM; ZM.

*victoriae* Candeze

*Crepidomenus victoriae*, Zwaluwenburg, 1959, Pac. Ins. 1: 403.  
TYPE: BM.

*vulneratus* Candeze

*Crepidomenus vulneratus*, Zwaluwenburg, 1959, Pac. Ins. 1: 403.  
TYPE: IRSNB.

Genus *Paracrepidomenus* Schwarz*filiformis* Candeze

*Paracrepidomenus filiformis*, Zwaluwenburg, 1959, Pac. Ins. 1: 403.  
TYPE: BM.

## p. 56.

Genus *Microdesmes* Candeze*mastersi* (Macleay)

PARATYPES: (cotypes)—SAM.

Subfamily **ELATERINAE**(to replace subfamily *LUDIINAE*)

Genus *Elater* Linnaeus  
(to replace genus *Ludius* Berthold.)

*Elater*, Hincks, 1956, Journ. Soc. Brit. Ent. 5: 198.

p. 57.

Genus *Neotrichophorus* Jacobson.

both Australian species transferred back to genus *Megapenthes*. Genus *Neotrichophorus* should be omitted from Australian list.

p. 58.

Genus *Anilicus* Candeze*quadriguttatus* (Erichson)

*Melanoxanthus quadriguttatus*, Lea, 1908, Proc. Roy. Soc. Vict. (N.S.) **20**: 157.

TYPE: ZM.

*semiflavus* (Germar)

TYPE: ZM.

*xanthomus* (Macleay, W. S.)

TYPE: MACL.

Genus *Paranilicus* Candeze*brevicornis* (Macleay)

PARATYPES: (cotypes)—SAM.

p. 59.

Genus *Agonischius* Candeze*brevis* Candeze

*Agonischius brevis*, Zwaluwenburg, 1959, Pac. Inst. **1**: 408.

TYPE: MDN (designated by Fleutiaux).

*mjobergi* Elston

*Agonischius mjobergi*, Zwaluwenburg, 1959, Pac. Ins. **1**: 409.

p. 60.

Genus *Dicteniophorus* Candeze*badiipennis* Candeze

*Dicteniophorus badiipennis*, Zwaluwenburg, 1959, Pac. Ins. **1**: 409.

TYPE: BM.

p. 61. *fusiformis* Candeze

*Dicteniophorus fusiformis*, Redtenbacher, 1868, Reise der . . . Novara. Zool.

**2**: 96.

TYPE: BM.

*melanoderus* Candeze

*Dicteniophorus melanoderus*, Redtenbacher, 1868, ibid.: 96.

*Dicteniophorus melanoderus*, Zwaluwenburg, 1959, Pac. Ins. **1**: 410.

TYPE: BM.

*ramifer* (Eschscholtz)

*Dicteniophorus ramifer*, Redtenbacher, 1868, Reise der . . . Novara Zool.

**2**: 96.

TYPE: ZM.

p. 62.

Genus *Anilicopsis* Schwarz

*Anilicopsis dubius* (Schwarz) is a synonym of *Heligmus glyphoderus*, Candeze, a South American species which has been incorrectly referred to Australia. It should be omitted from Australian list.

ref. Quelle, 1934, Mitt. D. Ent. Ges. **5**: 33-34.

Genus *Acroniopus* Erichson

*fuliginosus* Candeze

TYPE: ZM.

*bumilis* (Erichson)

TYPE: ZM.

*infimus* (Erichson)

TYPE: ZM.

*pallidus* Blackburn

TYPE: SAM.

Subfamily *DENTICOLLINAE*

p. 63.

Genus *Macromalocera* Hope

*cerambooides* Hope

*Macromalocera cerambooides*, Zwaluwenburg, 1959, Pac. Ins. **1**: 410.

TYPE: Oxford (?).

*coenosa* Hope

*Macromalocera coenosa*, Zwaluwenburg, 1959, ibid.

TYPE: Oxford (?).

*sinuaticollis* Blackburn

*Macromalocera sinuaticollis*, Zwaluwenburg, 1959, ibid.

TYPE: BM.

Genus *Hemioipsida* Macleay

This genus belong to the family *Eucnemidae*, and should be omitted from list of Elateridae.

ref. Lea, 1895, Proc. Linn. Soc. N.S.W. **10**: 230.

Subfamily *PHYSODACTYLINAE*

p. 64.

Genus *Patriciella* Zwaluwenburg

This name to replace *Patricia* Zwaluwenburg non Fox.

ref. Zwaluwenburg, 1953, Proc. Hawaii. Ent. Soc. **15**: 20.

## ADDITIONAL REFERENCES.

1. Arnett, R. H., 1952, Wasmann Journ. Biol. **10**: 103-126.
2. Blackburn, T., 1896, Report Horn Exped. Centr. Austr. Pt. 2 Zool. Coleoptera. 254-308 (271-272).
3. " 1897, Trans. roy. Soc. S. Austr. **21**: 28-39 (32-33).
4. Burns, A. N., 1928, Qld. Agr. Journ. **30**: 426.
5. Froggatt, W. W., 1923, "Forest Insects of Australia," Sydney. 171 pp. (35).
6. Glen, R., 1950, Smiths. Misc. Coll. **111**(11): 1-246 (181-182).
7. Heller, K. M., 1900, Denkschr. med.-naturwiss. Ges. Jena **8**(17): 615-626 (620). in Semon R. Zoolog. Forschungsreise Austr. 1891-93.5(5).
8. Lea, A. M., 1912, Trans. roy. Soc. S. Austr. **36**: v-xl.
9. Neboiss, A., 1956, Mem. Nat. Mus. Vict. **22**(2): 1-75.
10. " 1957, Austr. J. Zool. **5**: 496-520.
11. " 1959, Austr. J. Zool. **7**: 136-145.
12. " 1960, Austr. J. Zool. **8**: 289-306.
13. Quelle, F., 1934, Mitt. D. ent. Ges. Berlin. **5**: 33-34.
- . Semon, R.—see Heller, K. M.
14. Zwaluwenburg, R. H., Van, 1953, Proc. Hawaii ent. Soc. **15**: 20.
15. " 1959, Pac. Ins. **1**: 347-414.

This issue completes Memoirs No. 22.







